

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Suvashis Bhattacharya on Apr. 25, 2008.

The application has been amended as follows:

As to claim 46, remove letter "A" before the limitation "device" at line 1 and insert in its place "An interface" such that it reads, "An interface device."

As to claim 47, insert "interface" between "The" and "device" at line 1 such that it reads, "The interface device."

As to claim 48, insert "interface" between "The" and "device" at line 1 such that it reads, "The interface device."

As to claim 49, insert "interface" between "The" and "device" at line 1 such that it reads, "The interface device."

As to claim 50, insert "interface" between "The" and "device" at line 1 such that it reads, "The interface device."

As to claim 52, insert "interface" between "The" and "device" at line 1 such that it reads, "The interface device."

As to claim 53, insert "interface" between "The" and "device" at line 1 such that it reads, "The interface device."

As to claim 54, insert "interface" between "The" and "device" at line 1 such that it reads, "The interface device."

As to claim 55, insert "interface" between "The" and "device" at line 1 such that it reads, "The interface device."

Allowable Subject Matter

2. Claims 46-50, 52-55 and 85-113 are allowed.
3. The following is an examiner's statement of reasons for allowance:

U.S. Patent No. 5,808,603 to Chen ("Chen") discloses an interface device (Chen, 10, 20, 30) for use with a computer, device, comprising: a housing (Chen, 10, 20, 30) having a moveable portion (Chen, top portion 10 that is grasped by a user) and a base portion (Chen, 20, 30), wherein the moveable portion (Chen, 10) is moveable with respect to the base portion (Chen, 20, 30) while coupled to the base portion (Chen, 20, 30) (Chen, Figs. 4-5). A sensor (Chen, 33, 336, 34, 346) is coupled to the housing (Chen, 10, 20, 30) and configured to output a sensor signal to the computer device based on a manipulation of the housing (Chen, 10, 20, 30) by a user (Chen, col. 6, l. 37 - col. 7, l. 33).

A computer-generated English translation of JP Patent Publication No. 09-026850 by Ozaka et al. ("Ozaka") discloses an interface device for use with a computer device, comprising: a housing having a top portion, which is grasped by a user, and a base portion; and an actuator (Ozaka, 201, 202) coupled to the upper portion (Ozaka, drawing 10), the actuator having an eccentric mass and configured to actuate the eccentric mass to output an inertial haptic force to the top portion in response to an actuating signal from the computer device, wherein the inertial haptic force is felt by the user when in contact with the top portion of the housing (Ozaka, ¶¶ [0016, 0080]).

However, as to claim 46, the prior art of record fails to teach or suggest a device for sensing movement in an x-y plane, comprising: an actuator configured to output a haptic effect, the actuator having an eccentric mass rotatable about a shaft, the actuator configured to rotate the eccentric mass about the shaft with an acceleration upon being activated; and an actuator sensor coupled to the actuator and configured to measure the

amount of rotation of the eccentric mass when the actuator is activated, wherein the actuator controls the amount of rotation of the eccentric mass in response to the measured amount of rotation to output an inertial haptic effect pulse to the housing, as claimed.

As to claim 94, the prior art of record fails to teach or suggest an interface for use with a computer device, comprising: an actuator coupled to the housing and having an eccentric mass, the actuator configured to rotate the eccentric mass about a shaft in response to an actuating signal; and an actuator sensor coupled to the actuator and configured to measure the amount of rotation of the eccentric mass upon receiving the actuating signal, wherein the actuator controls the amount of rotation of the eccentric mass in response to the measured amount of rotation to output an inertial haptic effect pulse to the housing, as claimed.

As to claim 104, the prior art of record fails to teach or suggest an interface device for use with a computer device wherein an actuator controls the amount of rotation of an eccentric mass in response to a measured amount of rotation of the eccentric mass upon receiving an actuating signal, wherein an inertial haptic force is output by the actuated eccentric mass and felt by the user when in contact with a moveable portion of the interface device housing, as claimed.

As to claim 113, the prior art of record fails to teach or suggest an interface device for use with a computer device comprising means for controlling the amount of rotation of an eccentric mass in response to a measured amount of rotation of the eccentric mass upon receiving an actuating signal, wherein an inertial haptic force is output by the rotated eccentric mass and felt by the user when in contact with a moveable portion of the interface device housing, as claimed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander S. Beck whose telephone number is (571)272-7765. The examiner can normally be reached on M-F, 8AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sumati Lefkowitz/
Supervisory Patent Examiner, Art Unit 2629

asb
Apr. 24, 2008